

War Closes Supply of Valentines From Germany

TEUTONS Have Supplied High-Grade Valentines for Europe and the United States in the Past, But Great Struggle Does Away With This Trade—Dislocation of the Whole Printing and Lithographic Trade Causes Inconvenience to American Importers and Manufacturers—Germans Successful in Lithography and Chrome-Lithography, as Well as Affiliated Industries.

Germany shipped abroad from sixty to sixty-five thousand tons of aniline dyes, of which the United States gets from fourteen to fifteen thousand tons. The quantity at present is not anything like this, not only because of the interference by England with all commerce, but also because Germany is not of a mind to let the United States have chemicals and dyes without getting something in return.

Before England and France declared cotton contraband, Germany insisted on having American cotton in exchange for chemicals and dyes. Later, in the desire to promote good will in the United States, some liberality has been shown notwithstanding the inability to get cotton, but the American printing industry and the paper mills are still seriously inconvenienced. The bureau of engraving and printing, by the aid of the State Department in reaching an agreement with both Germany and England, obtained a cargo of dyes, in five colors, which will be sufficient for the stamps for a full year, and the assurance is given that the postage stamps will be brightened up, but private industries are not so well off as government industries in this respect. The interruption of the German book and lithographic trade, due to the success of the allies in keeping Germany from commerce off the seas, may be having some reflex effect on the industries of the empire since it deprives the German people of a considerable source of revenue from exports.

The Germans have been successful in lithography and chrome-lithography and in affiliated industries as they have been in other lines, where they have applied scientific methods to the utilization of new inventions. They also have had the advantage of the production of lithographic stones within their own borders.

People who choose to look askance upon German industry and commercial progress and who unduly stress German "kultur" only national efficiency in its crudest form, may be surprised to learn something of the high state of the German printing industry.

When the war broke out there was in progress at Leipzig an international exposition of book industries and graphic arts. Leipzig is as notable for these exhibitions as for the annual fur sale, or its musical facilities. It is the center of the German book printing industry and its products go all over the world.

The exposition grounds covered 100 acres. German exhibits comprised the major part, yet there were notable exhibits from nearly all the other European countries. The United States had a large exhibit of its printing industries, but the Library of Congress gave an exhibition which demonstrated how far superior its system is in supplying patrons with books to the much-vaunted German efficiency. In this respect the Germans were forced to admit that their system was far behind our own that they might never catch up. They consoled themselves with the reflection that they were never in a hurry for books, anyhow, a wait of six hours being what they were accustomed to.

The Leipzig exposition was declared to be cultural in its essentials. The purpose was to show a clear picture

of international culture based on the art of writing and printing, and of the book trade as a disseminator of knowledge. It was sought to set forth how closely these subjects are connected with science, art and literature and with the progress and civilization of the human race.

In the turmoil of war discussion and of partisan passions it is difficult to recall this Leipzig exposition of the book industries and graphic arts as an offset to Prussian militarism. In the heated partisanship it is also worth while to recall some of the books that have made Leipzig famous as an international publishing center. One of these is Baedeker, others are translations of the classics into English and still others are reprints of the English classics.

It may be assumed as a matter of course that the book industry of Leipzig at present is not booming any more than the toy trade of the city. For example, the United States used to take approximately 1,000,000 of books and chromos and lithographic prints, while the imports now are negligible.

Germany, however, is not likely, because of any temporary interruption, to let her lithographic and printing industries be permanently undermined. German success in oil color machines has been watched by manufacturers in other countries, as well as her advances in photogravure processes. Some

of the German oil color printing machines print twelve colors at once. The United States has imported some second-hand lithographic machines, but American manufacturers have rather more than held their own in competition in chrome lithography.

Like everything else in Germany, there is a progressive "kartell," or trust, which controls the industry. It has been applied to the domestic trade with rather more success than to foreign business.

The photographic industry has suffered along with the affiliated industries, and Dresden, which is a large exporter of photo apparatus and card-board, has felt the interruption to normal commerce. About \$15,000,000 is invested in the German photographic industry, while considerable sums are also invested in the subsidiary concerns.

Before the war, had a very profitable trade with the United States in the exportation of lithographic material as well as finished products, such as fine calendars. Some of the American who were prominent in the American Chamber of Commerce of Berlin were engaged in this business. They have tried to keep it going in spite of the war, but they have experienced many difficulties.

Nuremberg, which most visitors, because of its middle-age memories and monuments, consider the most attractive city in Germany, is also feeling the effect of the war on the printing industries and numerous other affiliated industries.

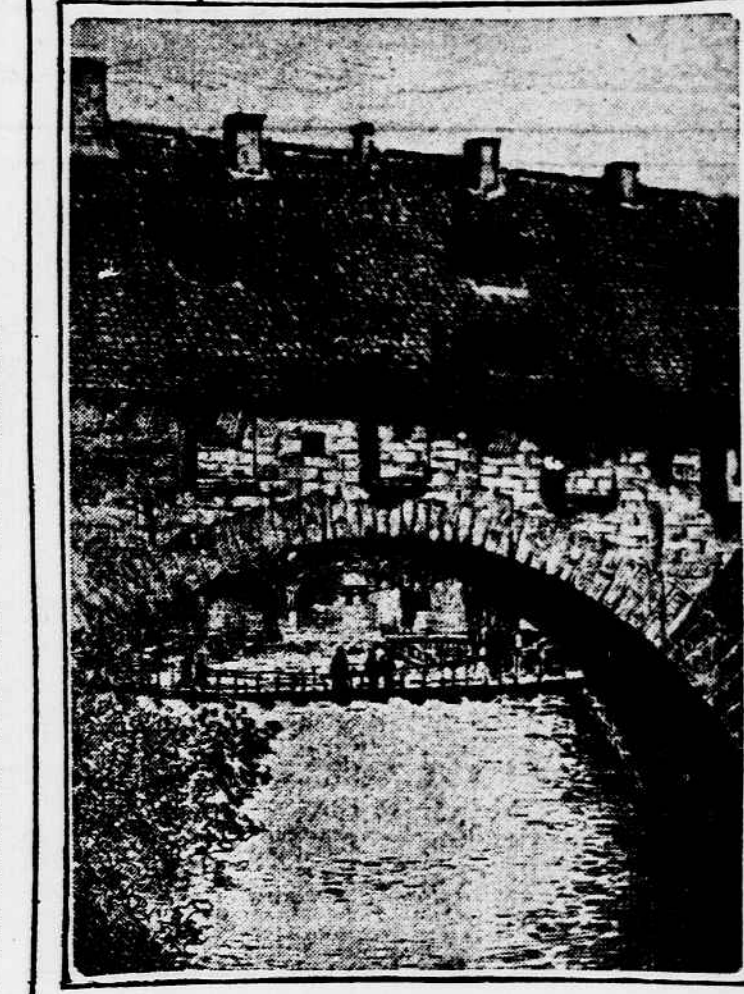
The possession of lithographic stones has been one of the means of building

up a business in lithographic products, including post cards. When the Payne-Aldrich tariff law was passed the post card manufacturers of Nuremberg and of other places in Germany complained bitterly that it would compel the transfer of their industry to the United States. That was the purpose of the schedule which covered post cards. Nevertheless, the German post card industry was not destroyed, or else it revived after the tariff law went into effect, with its lower rates, went into effect, for Nuremberg continued to export colored post cards to the United States.

It also sent considerable quantities of lithographic prints and decalcomanias and some decalcomania paper. But it was beginning to feel foreign competition, and particularly the competition of the United States in chrome-lithography before the war interrupted the business.

Nuremberg and its sister city of Furtw are especially noted for the production of bronze powders. Before the war they have sent \$1,000,000 and upward of these products to the United States. There are fifty factories engaged in different forms of this industry, the cheap water power being the source of energy.

The raw material of these beautiful bronze powders is copper and zinc for the better grades, and metal scraps for the poorer ones. The United States got gold leaf, tin



FOOTBRIDGE OVER THE PEGNITZ AT NUREMBERG.

foiled, goldbeaters' molds, metal leaf and coated paper from the Nuremberg district, as well as bronze metal clip-pings, and some of the most valuable quantities of what is known as leonic ware, that is, tincl ornaments, braids, tassels, and silver and gilt copper wire threads. This trade has been seriously interrupted by the war, but American manufacturers have managed to get along. Before the hostilities opened they were already making aluminum bronze on their own account and were not dependent on Nuremberg.

The raw material for this class of Nuremberg industries was commandeered by the government, which for war purposes laid an embargo on the copper and zinc used in the manufacture of the bronze powders as well as colors, including the powders themselves. The quantity of copper used, however, was not so great as to make it important as a source of war munitions to the government, and if there were an export trade to be had the Nuremberg industries would be able to obtain whatever they needed.

The metal toy trade of the world is centered at Nuremberg, and this business has been more or less affected by hostilities. One factory had 1,500 employees. In some years the exports to the United States from the Nuremberg consular district, which comprises practically all of northern Bavaria, amounted to \$2,000,000.

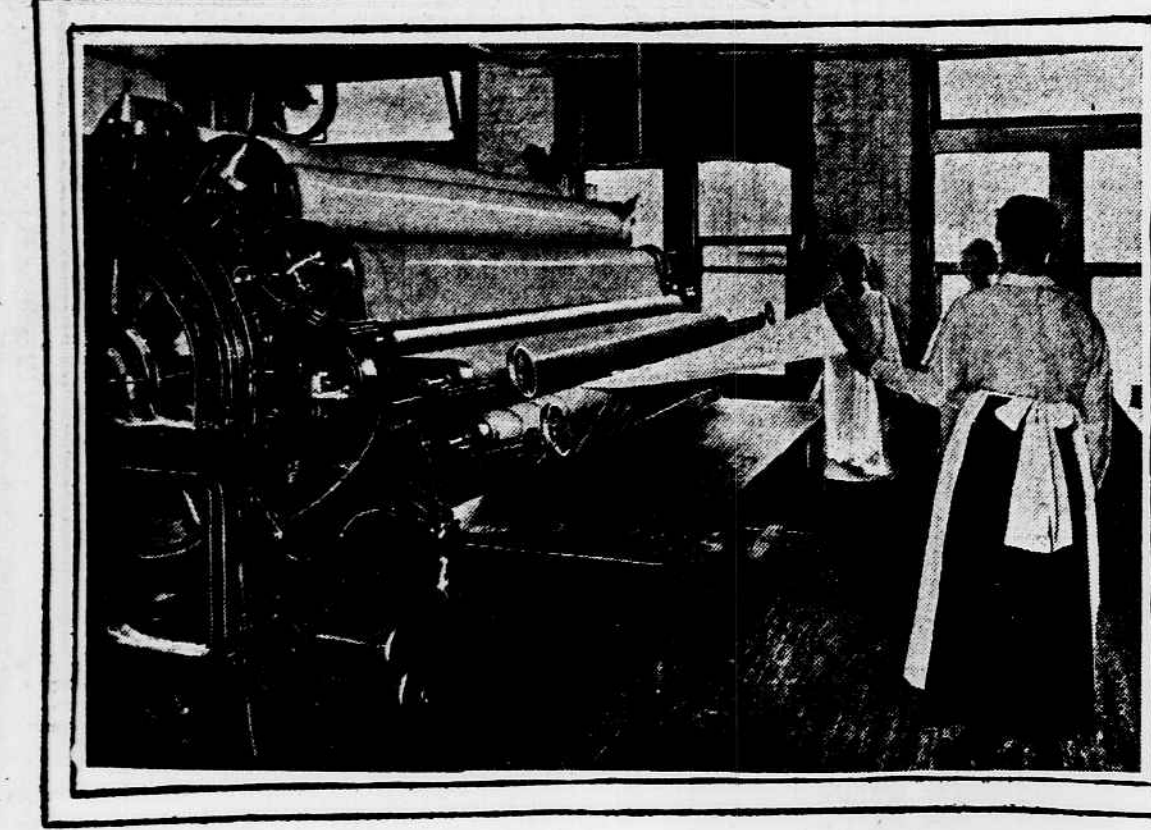
When the war is over and Americans who know Nuremberg make their annual pilgrimage to it they may find that some of the branches of the lithographic and printing industry are reeling slowly, but the medieval city itself will not have lost any of the attractions of which Longfellow wrote, and which other literary craftsmen have vainly tried to describe. Nuremberg has a charm of its own, and the charm is the genuine flavor of the middle ages preserved in the midst of modern industrial activity.

American manufacturers, when the war broke out, saw that there would be interruption with the German source of supply for toys, and they set themselves to making many of the favorites of which Nuremberg previously had a monopoly. It is not likely now that the United States will depend on Bavaria for these toys, at least in such



GERMAN FAMILY MAKING TOYS AND VALENTINES.

Sending the Capital's Linen Supply Over "Soap Route" in Big Laundries



THE BIG PRESS USED FOR "FLAT WORK."

DO you ever have trouble with your necktie sticking in your collar, Mr. Man? Possibly it is due to the silk threads in the tie, but then, again, it may be due to the sort of finish your laundry has given, or failed to give, or to the fact that corn starch rather than wheat starch was used in obtaining that finish. Many laundrymen of Washington claim that wheat starch is far superior to corn starch, but inasmuch as starch from wheat costs about twice as much as that obtained from corn, both kinds have their own distinct claims for popularity.

This proposition of so laundering collars that neckties will slip through them easily, and thereby minimize the number of tempers lost in Washington each morning at "dressing time," is but one of many problems faced by one of the city's largest industries. Commercial laundry plants, of ever increasing size, have existed in Washington for many years, are still increasing and give promise of even more increase.

So inclined. So the modern laundryman, with his system, his facilities and his machinery, has gradually been making inroads upon the incomes of washerwomen. Of course, there are plenty of persons who have their laundry done at home, and even some who send their clothes to one of the big plants for renovation request that they be "done by hand."

As in many other industries, machinery has been one of the biggest factors in the development of the laundry business. Machinery has made possible both cheapness and efficiency; also the expeditious handling of large quantities of work. This last is particularly necessary, especially where the laundry caters to restaurants and hotels, these institutions often having enormous quantities of table linen which must be washed between meals. Without the aid of machinery the modern laundryman would be "lost." It is considered extremely doubtful whether the great industry could ever have assumed its present proportions without machinery, even under the most efficient management and methods.

Enormous quantities of materials are used, particularly of water, the first requisite of the launderer. Washington's largest laundry uses 4,457,000 cubic feet of water yearly, or, figured in weight, 123,876 tons. The two next largest laundries use 2,198,000 and 1,993,000 cubic feet of water, respectively. Amounts paid by these laundries in water tax totals no

insignificant sum, the largest alone paying more than \$100,000 annually. Soap and starch are likewise used in large quantities. It may be noted that the popular form of soap is a powder, being furnished by the barrel. This is not dumped into the washing machines, as might commonly be supposed, but is first put into liquid form by mixing with water. Were it merely dumped into the washing machines without this precaution it would not mix so easily.

Then take the little buttons used to hold the neckband of shirts together, and the little buttons used on outing shirts. Both of these kinds of buttons are bought 100 boxes at a time, each box containing 1,700 buttons. Even that man who is continually losing his collar buttons under the bureau—the one the humorists are forever describing—could be kept for a considerable time with such a supply.

Obviously the number of persons employed in the laundry industry in the District must be large, although it would be difficult to estimate to the exact number. Beyond doubt, however, it would make no small sized aggregation if all were brought together in one place, for, despite their wide use of machinery, the human hand is necessary in a score or more of places and operations.

clothes begin to assume their maximum proportions. Then the work continues steadily throughout the remainder of the day.

It is but a short time after the bundles of soiled laundry arrive at the plant that the various kinds to be found in each part company and are sorted like unto like—collars and cuffs in one pile, bed-clothes in another, table linen in another, and so on. Previous to this, however, each piece is marked in some distinctive manner, for instance, by a number. This is done with an ink which cannot be washed out, so that after the cleaning and ironing process the thousands of articles can be identified.

Methods of washing are the same for practically all articles, smaller ones being cleaned in smaller machines. Washing is done by placing the clothes in revolving cylinders which have the general appearance of household perforated with small, round holes. As these turn rapidly the soapy water is forced through the clothes, and these in turn rub against each other and the sides of the cylinder. This operation is continued until the clothes are thoroughly clean and white. The water can easily be drained off as many times as may prove necessary.

Wringing is likewise accomplished through a machine. The wringer is a revolving metal cylinder, standing on one end, and with the upper part open. Placed in this, the wet clothes are sent spinning around at 1,200 revolutions a minute until they are nearly dry. Many articles are not dried entirely, thus saving time and labor of sprinkling. The wringing machine leaves them only about as damp as they would be hoisted by elevator to an upper floor, where they are put in a "shaker-up." This is similar to the washing machine, except that no water is used. After a few minutes of shaking, the clothes, previously a clinging, twisted mass, are ready easily to be separated and resumed once more their individual identities. Here the processes of treatment divide. Obviously the collar and the

tablecloth, the shirt and the hose, cannot all be pressed by the same machine. Handwork may be dispensed with, but the ironing machine, which is the next and probably the most important operation, a special machine is used. This is shaped so that it forms a body for the shirt, with a circular piece around which the neckband fits. The bosom is pressed out smoothly by hand and a moment after a plate of apparatus, automatically heated, exerts a great pressure for the necessary time, and the bosom of the shirt is completely ironed. No friction has been used, but the shirt bosom is smooth and glossy.

Two other small operations remain before the shirt is finished—the ironing of body and sleeves. Later it is put on a cardboard form and pinned, so as not to lose its shape. Metal, steam-heated forms with adjustable heels and toes are used for pressing hoes. By means of these metal forms, which give one the impression that a number of metallic divers have just dived under the counter and left their feet waving for help, the shape of the hose is retained.

It may be seen by the foregoing descriptions of work on various sorts of articles that each kind must receive more or less different treatment, according to its material and form. The operations cited are the most important ones and other pieces of work undergo similar treatment, with slight changes here and there, perhaps.

All work is examined before it is ready to be sent back to its owner. Pieces found to have been improperly shaped or otherwise failing to attain the proper standard are returned and done over. The completed work is as sorted by girls. It is no mean task with thousands of articles of a similar nature and thousands of different addresses. Small compartments are used for the different lots and in a compara-



AUTOMATICALLY PRESSING SHIRT BOSOMS.

tively brief period the articles are ready for wrapping. The wrapped bundles are then distributed to the wagons.

Each article has been handled a score or more of times, and frequently by as many people. From soiled linen to clean linen there is a continuous pathway of soap, water, heat, metal and human labor.

Machinery plays an important part—in fact, it is one of the most important factors in modern commercial laundry work by big plants—but the human element cannot be eliminated. Machines are everywhere, but the human

hand and the human head must be behind them to see that they work in the right manner.

Mountains of soap and starch are used by the laundries of Washington in a year. But the successful laundryman is the one who is watching his little expenses; seeing that the gas bills are not too high within the limits and the rollers, and the energies, either mechanical or human, are not wasted.

It is a mammoth work, that of keeping Washington's linen "spick and span." Further, that work of sending soiled linen over the wet, soapy route back to the point of cleanliness is an ever-growing one, and the route is becoming heavier with "traffic" each year.

The War Spirit.

A BRITISH diplomat was praising the cheerful and devoted spirit wherewith the women of Britain are doing their share of war work.

"There is a story that illustrates this fine spirit," said he. "A man asked his next door neighbor in an English town: 'Anybody ill in your house? I heard a lot of frantic running up and down stairs last night. It seemed to go on pretty much all evening.' 'Here, by the way, I'd better explain that an English bus has a double deck like the New York bus of Broadway and of 5th avenue. 'The other man said in answer to his friend: 'Oh, no, we've got nobody sick. It was just my wife you heard. You see, she's taken a job as bus conductor and last night she thought she'd have a bit of practice running up the steps.'"

The Cost.

EX-CHAIRMAN WALSH of the industrial relations commission, discussing the New Haven acquittal, said with a laugh:

"Some people thought the day had come when a crooked million would cost the crook dear. But I, for my part, never thought so. 'No, sir; the day has not yet come when the crooked millionaire will and himself in the position of the humble ex-jailbird. 'This humble ex-jailbird, invited one night to have an eleventh or twelfth beer, pulled out a big watch to see if he had time. 'Holy smoke! said his host. 'Holy smoke, you've got a watch! What did it cost you? 'Nine months,' the ex-jailbird answered, simply."